

IN THE CLAIMS

1-16 (Canceled without prejudice or disclaimer)

17. (Currently Amended) Control system for an internal combustion engine with a nitrogen oxide sensor and a connecting line for transmission of data from the sensor via an interface to an evaluating unit for digitization of the data, and with a connecting line for transmission of the digitized data from the evaluating unit to an engine control device, characterized in that:

the interface is a plug connector in the housing of which the evaluating unit is integrated.

18. (Previously Presented) Control system according to Claim 17, characterized in that the plug connector has an electrically conductive housing to shield the evaluating unit.

19. (Previously Presented) Control system according to Claim 17, characterized in that the plug connector or a mating plug connector corresponding to it has a cooling flange or a cooling surface with a thermal connection to at least one output component of the evaluating unit.

20. (Previously Presented) Control system according to Claim 17, characterized in that the sensor is an exhaust gas sensor.

21. (Previously Presented) Control system according to Claim 17, characterized in that the interface and the electrical connecting line to the sensor are moisture-proof.

22. (Previously Presented) Control system according to Claim 17, characterized in that the connecting line between the sensor and the interface is electromagnetically shielded.

23. (Previously Presented) Control system according to Claim 17, characterized in that the connecting line to the engine control device is a system bus.

24. (Previously Presented) Control system according to Claim 23, characterized in that a number of sensors are connected with the control device via the system bus.
25. (Previously Presented) Control system according to Claim 17, characterized in that the evaluating unit has a microprocessor.
26. (Previously Presented) Control system according to Claim 25, characterized in that the microprocessor can be matched individually to the sensor with software.
27. (Previously Presented) Control system according to Claim 17, characterized in that heating of the sensor can be regulated by the evaluating unit.
28. (Previously Presented) Control system according to Claim 17, characterized in that the evaluating unit can be adjusted with operational data by the engine control.
29. (Previously Presented) Control system according to Claim 17, characterized in that the interface is located closer to the sensor than to the engine control device.